

Water Supply Impacts

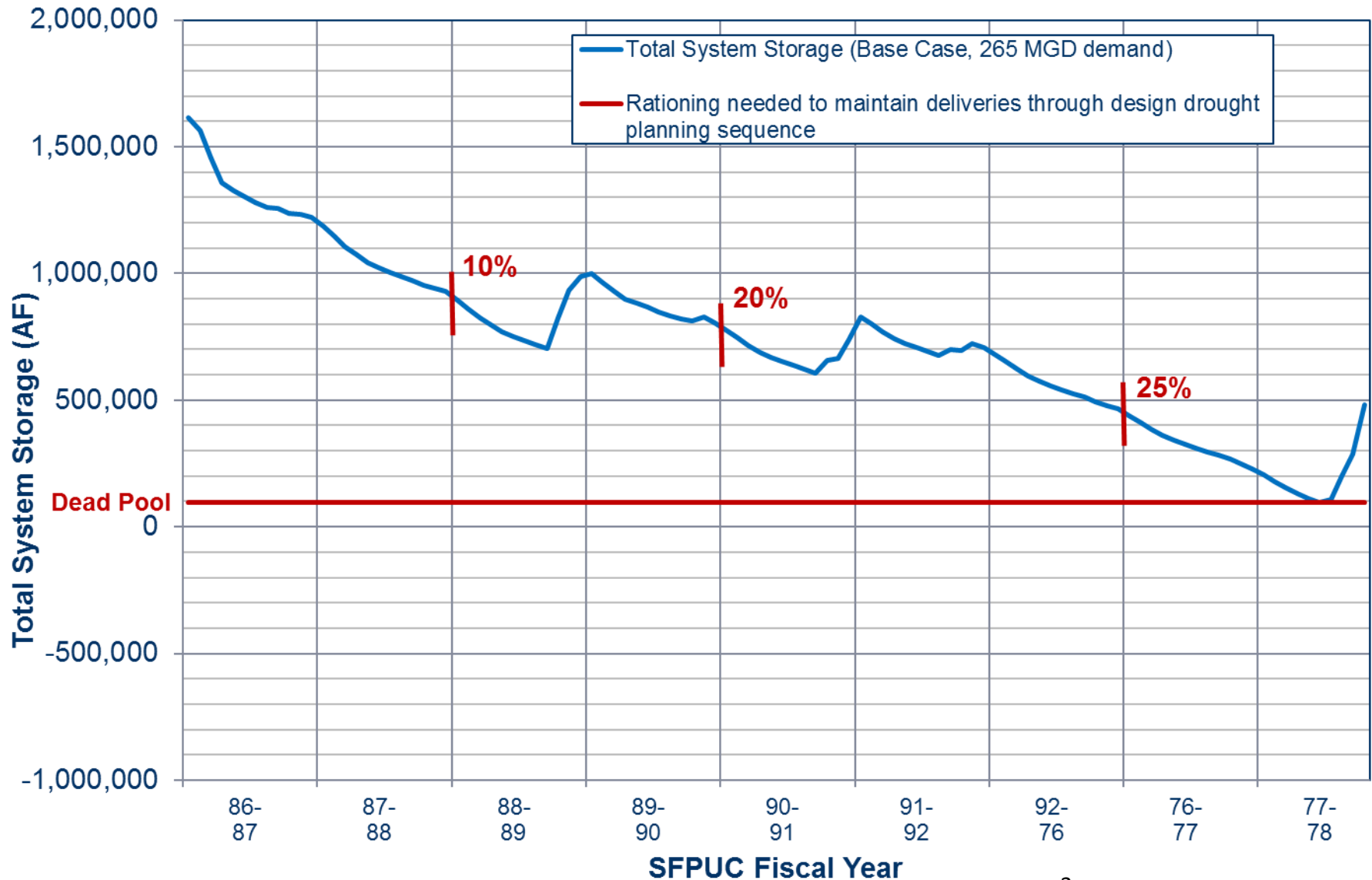
Hetch Hetchy Reservoir, January, 1991



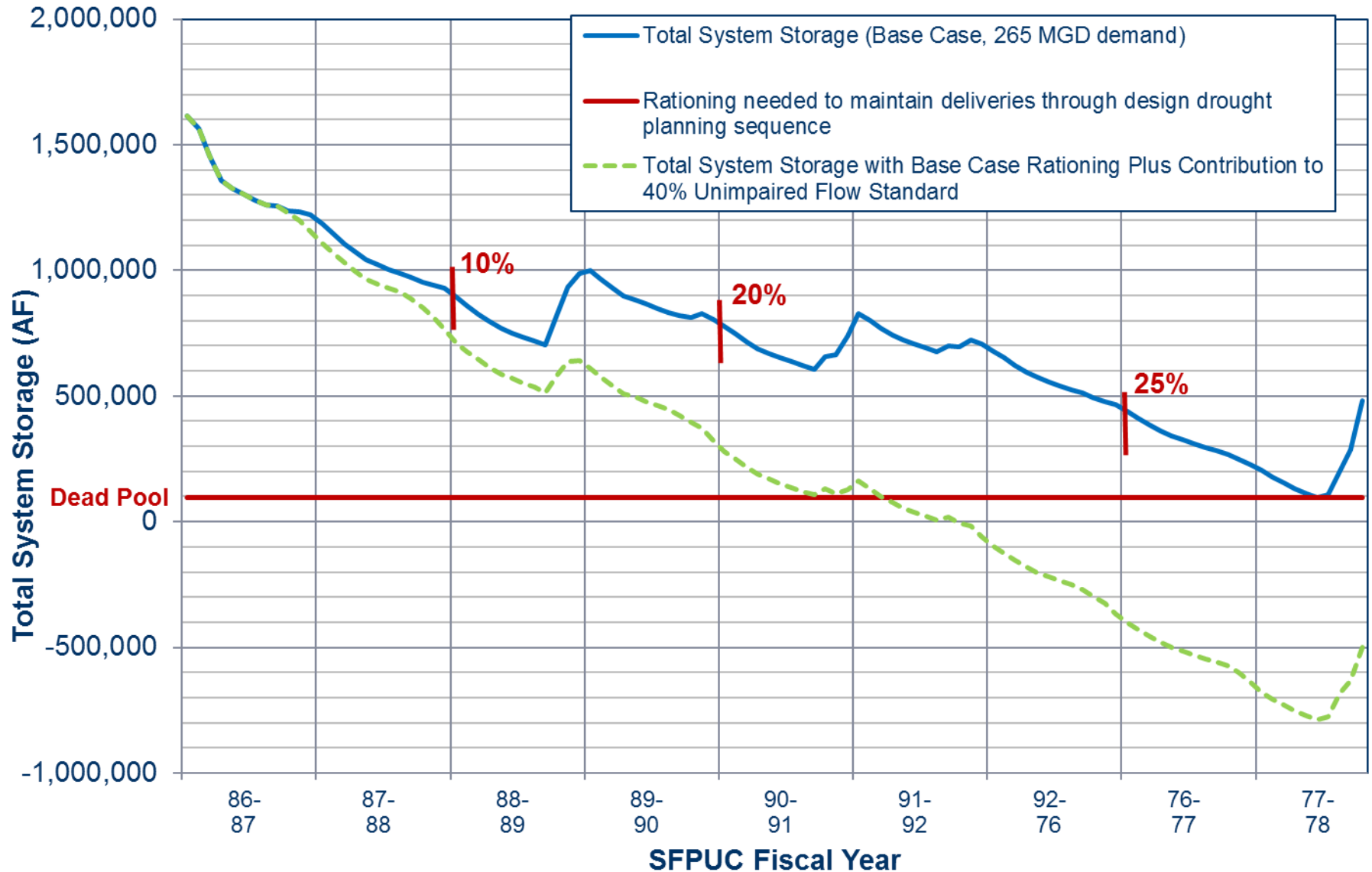
San Francisco Water Supply Planning

- Our Level of Service objective for water supply (used since 1994 and adopted in 2008) is to survive a specific 8.5-year drought planning scenario (1987-92 followed by 1976-77) with no more than 20% rationing from a total system demand of 265 MGD.

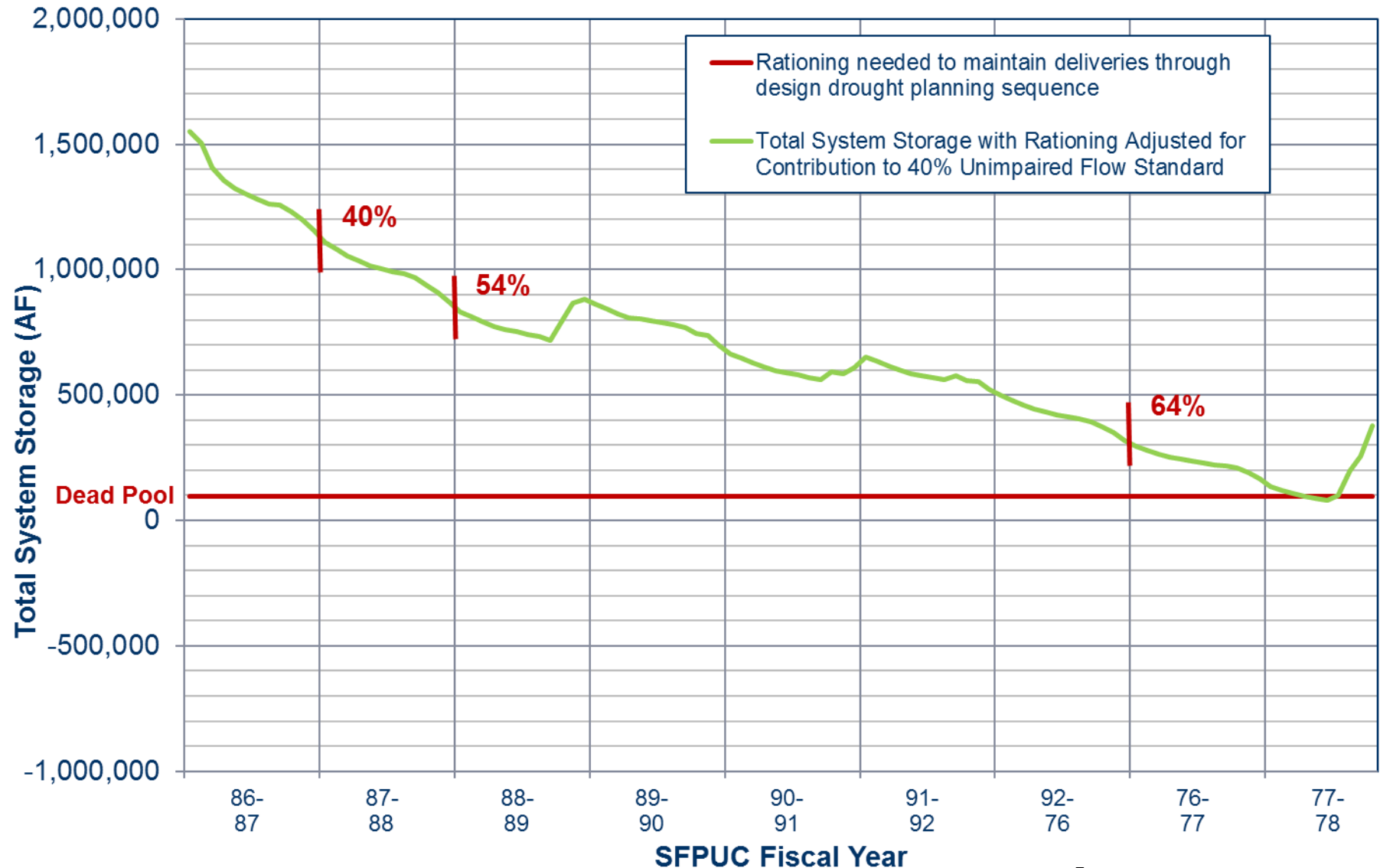
Total System Storage in Design Drought with 265 MGD Demand



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What About the Most Recent Drought?

- Under existing conditions we called for a voluntary 10% reduction in demands.
- The State ultimately required an average reduction of 14% across our service area.
- If the proposed Lower San Joaquin River WQCP had been in effect, we would have been looking at 40-50% rationing.

Consequences of Being Wrong

“When considering all the factors associated with the City’s entitlements to water, its physical system and the dire consequences of just being wrong in the forecasting of the length of drought that may hit the City, I can not agree with any comment that the City’s operation rule is overly conservative.”

Anson Moran, January 1994



San Francisco Chronicle Editorial

January 22, 2017

“[M]ore needs to be done. Nature is as likely as the water board to reduce Sierra flows. Better to plan for a drier future than fight over a diminishing water supply.”



What Major Investments in Uncertain Water Supply Projects Could Help?

- To achieve the Level of Service objective (265 MGD demand with no more than 20% rationing) requires:
 - Roughly 900,000 acre-feet of new storage ($900,000 = 2.5 \times \text{Hetch Hetchy}$).
 - Purified water projects (reusing wastewater for drinking water), but the outlook for these projects is uncertain, and only 4 potential projects are actually in the discussion stage.
 - Desalination plant with capacity of roughly 100 MGD in dry years, plus transmission pipelines throughout our service area.

Conclusions

- The State's proposal has significant impacts on the SFPUC water supply with uncertain benefits for the Tuolumne River.
- Benefits can be achieved for the Tuolumne River using our proposal for smart, functional flows combined with science-based measures other than flow.
- Negotiated settlements are superior to a regulatory solution that will only end in non-productive litigation.